Appln. No. 10/084,195

Amdt. Dated Feb. 20, 2004

Reply to Office Action of Dec. 23, 2003

IN THE CLAIMS:

1. (Currently Amended) A manually actuated sprayer comprising, a body member

having a discharge passage terminating in a discharge orifice through which liquid

product issues on sprayer actuation, an orifice cup mounted within the discharge

passage, the orifice cup comprising a base wall with an integral skirt extending in an

upstream direction relative to passage of the liquid product, said discharge passage

[include] including a cylindrical bore of a predetermined wall diameter, the base wall of

the orifice cup containing the discharge orifice and the base wall having an outer

diameter substantially the same as said predetermined wall diameter, an outer wall of

the skirt being frusto-conical and tapering outwardly in the upstream direction from the

base wall to a free end of the skirt such that the maximum diameter of the outer wall

exceeds said predetermined diameter, the outer wall of the skirt sealingly engaging the

wall of the cylindrical bore for positively retaining the orifice cup within the bore and

preventing any passage of the liquid product between the outer wall of the skirt and the

wall of the cylindrical bore.

Claims 2-3. (Canceled).

4. (Currently Amended) The sprayer according to claim [2] 7, wherein the retention

bead has an outer diameter substantially equal to the maximum diameter of the outer

wall.

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5. (Currently Amended) The sprayer according to claim [3] 8, wherein a liquid passageway is defined between the probe and the wall of the bore in communication with the mixing chamber means.

6. (Currently Amended) The sprayer according to claim [3] 8, wherein the spin mechanics means comprise tangential grooves leading into a spin chamber, an end surface of the probe overlying the grooves to define tangential passages.

A manually actuated sprayer comprising, a body member having a 7. (New) discharge passage terminating in a discharge orifice through which liquid product issues on sprayer actuation, an orifice cup mounted within the discharge passage, the orifice cup comprising a base wall with an integral skirt extending in an upstream direction relative to passage of the liquid product, said discharge passage including a cylindrical bore of a predetermined wall diameter, the base wall of the orifice cup containing the discharge orifice and the base wall having an outer diameter substantially the same as said predetermined wall diameter, an outer wall of the skirt being frusto-conical and tapering outwardly in the upstream direction such that the maximum diameter of the outer wall exceeds said predetermined diameter, the outer wall of the skirt sealingly engaging the wall of the cylindrical bore for positively retaining the orifice cup within the bore and preventing any passage of the liquid product between the outer wall of the skirt and the wall of the cylindrical bore, and the orifice cup having an annular retention bead projecting radially outwardly of a side of the base wall into engagement with the wall of the cylindrical bore for further positively retaining the orifice cup within the bore.

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A manually actuated sprayer comprising, a body member having a 8. (New) discharge passage terminating in a discharge orifice through which liquid product issues on sprayer actuation, an orifice cup mounted within the discharge passage, the orifice cup comprising a base wall with an integral skirt extending in an upstream direction relative to passage of the liquid product, said discharge passage including a cylindrical bore of a predetermined wall diameter, the base wall of the orifice cup containing the discharge orifice and the base wall having an outer diameter substantially the same as said predetermined wall diameter, an outer wall of the skirt being frusto-conical and tapering outwardly in the upstream direction such that the maximum diameter of the outer wall exceeds said predetermined diameter, the outer wall of the skirt sealingly engaging the wall of the cylindrical bore for positively retaining the orifice cup within the bore and preventing any passage of the liquid product between the outer wall of the skirt and the wall of the cylindrical bore, and the body member having a cylindrical probe extending into the orifice cup toward the base wall to define spin mechanics means together with a confronting surface of the base wall.